

WHAT IS CLAIMED IS:

1. An exhaust gas purifying apparatus for an internal combustion engine, comprising:

5 a particulate filter which is disposed in an exhaust gas path of the internal combustion engine, and which collects particulates in exhaust gas;

an oxidation catalyst positioned on the upstream side of the filter and disposed in the exhaust gas path; and

10 forcible recovery control element for executing filter temperature raising control in which a temperature of the filter is raised by supplying unburned fuel to the oxidation catalyst after executing catalytic temperature raising control in which the
15 oxidation catalyst is activated by making an exhaust gas temperature of the engine rise, when the filter is forcibly recovered,

the exhaust gas purifying apparatus for an internal combustion engine, further comprising:

20 a front oxidation catalyst positioned further upstream than the oxidation catalyst and disposed in the exhaust gas path;

a bypass path provided in the exhaust gas path so as to bypass the front oxidation catalyst; and

25 a passage switching device which switches the flow of exhaust gas to the front oxidation catalyst side or the bypass path side,

wherein, at the time of executing the catalytic temperature raising control, the passage switching device switches the flow of exhaust gas to the front oxidation catalyst side, and at the time of executing
5 the filter temperature raising control, the passage switching device switches the flow of exhaust gas to the bypass path side.

2. An exhaust gas purifying apparatus for an internal combustion engine, according to claim 1,
10 wherein a capacity of the front oxidation catalyst is smaller than that of the oxidation catalyst.

3. An exhaust gas purifying apparatus for an internal combustion engine, according to claim 1,
15 wherein the front oxidation catalyst is disposed so as to be closer to the internal combustion engine than the oxidation catalyst.

4. An exhaust gas purifying apparatus for an internal combustion engine, according to claim 1,
20 wherein the passage switching device is switched to the bypass path side other than at the time of the catalytic temperature raising control.

5. An exhaust gas purifying method for an internal combustion engine, comprising:

a particulate filter which is disposed in
25 an exhaust gas path of the internal combustion engine, and which collects particulates in exhaust gas;

an oxidation catalyst positioned on the upstream

side of the filter and disposed in the exhaust gas path; and

forcible recovery control element for executing filter temperature raising control in which a
5 temperature of the filter is raised by supplying unburned fuel to the oxidation catalyst after executing catalytic temperature raising control in which the oxidation catalyst is activated by making an exhaust gas temperature of the engine rise, when the filter is
10 forcibly recovered,

the exhaust gas purifying method for an internal combustion engine, further comprising:

a front oxidation catalyst positioned further upstream than the oxidation catalyst and disposed in
15 the exhaust gas path;

a bypass path provided in the exhaust gas path so as to bypass the front oxidation catalyst;

a passage switching device which switches the flow of exhaust gas to the front oxidation catalyst side or
20 the bypass path side;

a step of switching, by the passage switching device, the flow of exhaust gas to the front oxidation catalyst side at the time of executing the catalytic temperature raising control; and

25 a step of switching, by the passage switching device, the flow of exhaust gas to the bypass path side at the time of executing the filter temperature raising

control.

6. An exhaust gas purifying method for an
internal combustion engine, according to claim 5,
wherein a capacity of the front oxidation catalyst is
5 smaller than that of the oxidation catalyst.

7. An exhaust gas purifying method for an
internal combustion engine, according to claim 5,
wherein the front oxidation catalyst is disposed so as
to be closer to the internal combustion engine than the
10 oxidation catalyst.

8. An exhaust gas purifying method for an
internal combustion engine, according to claim 5,
comprising a step of switching the passage switching
device to the bypass path side other than at the time
15 of the catalytic temperature raising control.